

Modern ideas about cell death

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Abstract

© 2018 Human Stem Cell Institute. All rights reserved. Cell death is an important part of normal (physiological) and pathological histogenesis. In the past two decades, our knowledge of the processes of non-programmed and programmed cell death significantly enriched. The International Nomenclature Committee on Cell Death is constantly working, it regularly updates information on the terminology and development mechanisms recommended for this or that type of death, but the general principle of classification of cell death has not yet been worked out. In this review, the principle of separation according to which the mechanisms involved in physiological histogenesis include the rooting, the external pathway of apoptosis, anoikis, macroautophagy and lysosome-dependent cell death. The mechanisms involved in pathological histogenesis include: the internal pathway of apoptosis, necroptosis, pyroptosis, netosis, mitotic catastrophe, partanatos, entosis, mitochondrial-driven necrosis, ferroptosis, immunogenic cell death, necrosis and oncosis.

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Keywords

Apoptosis, Autophagy, Cell Death, Histogenesis, International nomenclature committee on cell Death, NCCD, Necrosis

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